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Remarks

Upon entry of this amendment, claims 1-22 will be pending in the application. Claim 1 is being amended to define selected embodiments of the group R^3 in formula (I). Claims 3, 11 and 13 are being amended to make editorial revisions. Claim 9 is amended to recite an additional embodiment of R^5 (see spec page 8, line 23). New claims 14-16 are added to recite particular embodiments of R^5 (see spec page 4, lines 28-31; page 5, lines 1-4 and page 8, lines 25-28). New claim 17 defines compounds of formula (I) wherein the limitations of claims 2-9 are incorporated into claim 1. New claim 18 recites compounds previously recited in claim 10. Claim 10 is amended to delete those embodiments and also to correct typographical errors and form. New claims 19-21 recite particular compounds of the invention (see spec page 23, line 5-29). New claim 22 is supported at spec page 1, lines 13-15. Support for these amendments is found as stated, in the claims as originally filed and throughout the specification, including Examples 34, 39, 47, 49, 53, 66, 70, 74, 99, 106 and 107. No new matter is being added.

Entry of this amendment and consideration of the following remarks is respectfully requested.

Rejection under 35 USC 103

On pages 2-4 of the Office Action, claims 1-13 are rejected under 35 USC 103(a) as obvious over Davies et al. (US 6,962,917; "Davies").

Davies discloses aminopiperidine derivatives of formula (I), depicted for example at column 1, lines 18-28.

In formula (I), Davies discloses that one of Z^1 - Z^5 is N, one is CR^{1a} and the remainder are CH. Alternatively, Davies discloses that one or two (preferably one) of Z^1 - Z^5 are independently CR^{1a} and the remainder are CH. However, when Z^1 - Z^5 are CR^{1a} or CH, R^1 is not hydrogen. Column 1, lines 29-52; column 4, lines 50-52.

Davies' Z^1 moiety corresponds to the same ring position as the Z^1 group of Applicants' formula (I). Davies' Z^3 moiety corresponds to the ring CR^{1b} group of Applicants' formula (I). Davies' Z^5 moiety corresponds to the ring CR^{1c} group of Applicants' formula (I).

Davies includes "halogen" among several possibilities for R^1 and R^{1a} . However, as noted by the Examiner, Davies does not provide any examples of compounds wherein Z^5 is C-halogen. Nor does Davies disclose any other particular embodiment where Z^5 is C-halogen. The Examiner posits nonetheless that Davies teaches equivalency of those compounds wherein Z^5 is CH with those generically claimed for formula (I). Applicants respectfully traverse.

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Davies teaches a preference that Z^5 is CH or N, Z^3 is CH or CF and Z^1 , Z^2 and Z^4 are each CH, or that Z^1 is N, Z^3 is CH or CF, and Z^2 , Z^4 and Z^5 are each CH. Column 4, lines 53-55. Further, Davies teaches a preference that when Z^5 is CR^{1a} , R^{1a} is preferably hydrogen, cyano, hydroxymethyl or carboxy, and most preferably hydrogen. Column 5, lines 4-5. Thus, rather than teaching equivalency as posited by the Examiner, the reference teaches away from Applicants' compounds of formula (I), which require a halogen substituent in the ring position corresponding to Davies' Z^5 .

Davies does not provide any teaching or suggestion to select halogen from the several possible groups defining R^1 and R^{1a} , nor to select the particular Z^5 position to bear such a substituent, no less in combination with the particular R^1 , R^{1a} , R^{1b} , R^{1c} , AB, R^6 , R^3 , U and R^5 groups required by the present claims. Rather, as stated above one skilled in the art would be lead away from making such selections.

In view of all of the above, Applicants respectfully submit that the present invention would not have been obvious in view of Davies. Reconsideration and withdrawal of the rejection is respectfully requested.

Obviousness-type double patenting rejections

US patent 7,312,212

On pages 4-5 of the Office Action, claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of US patent 7,312,212 (Daines et al.).

Applicants submit that the present claims would not have been obvious over the claims of US 7,312,212. In particular, the present claims require that the group R^3 be selected from H, (C_{1-3}) alkyl, hydroxy (C_{1-3}) alkyl, $CONH_2$, $COOH$, $-CH_2CONH_2$, $-CH_2COOH$, $-CONHCH_3$, and hydroxy in the 3-position optionally substituted by (C_{1-3}) alkyl. The '212 claims do not teach or suggest such a group R^3 . Rather, independent claim 1 of '212 requires that R^3 be trifluoromethyl, oxo, fluorine, or optionally substituted amino (column 75, lines 8-39). Reconsideration and withdrawal of the rejection is respectfully requested.

US patent 6,962,917

On pages 5-6 of the Office Action, claims 1-13 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of US patent 6,962,917.

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Applicants submit that the present claims are non obvious over US Patent 6,962,917 for the reasons stated above. For the same reasons, the present claims are not unpatentable on the ground of nonstatutory obviousness-type double patenting. Reconsideration and withdrawal of the rejection is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, reading "Loretta J. Sauermelch". The signature is fluid and cursive, with the first name "Loretta" being more prominent and the last name "Sauermelch" following in a similar style.

Loretta J. Sauermelch
Attorney for Applicants

GLAXOSMITHKLINE
Corporate Intellectual Property - UW2220
P.O. Box 1539
King of Prussia, PA 19406-0939
Telephone: (610) 270-6854
Facsimile: (610) 270-5073
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